

**Remarks/Arguments:**

This is in response to the office action of August 1, in which claims 17 - 20, 34 and 35 are rejected as anticipated by Houle (U.S. Patent 6513921). Claims 21 - 33 and 36 were rejected as obvious over Houle in view of Siddiqui (U.S. Patent 5939568).

The claims have been amended the better to distinguish the invention from the applied references.

Amended claim 17 corresponds to prior claims 17 to 21 (in part). Moreover, the binder component has been specified in accordance with section [0016] of the published application. In other words, we have included the binders which were mentioned in that section as particularly preferred binders into claim 17.

Claim 21 has been amended as well, since certain portions thereof are now included in claim 17. We have voluntarily deleted the optional feature from claim 21.

Since the binder component is now already present in claim 17, we have corrected the dependency of claims 22, 24 and 25. Claim 26 has been deleted altogether since claim 17 is now more limited than claim 26.

The dependency of claim 27 has also been corrected. Claim 27 now refers back to claim 17, since as noted above we have deleted the optional presence of additives from claim 21. Therefore, additives are recited for the first time now in claim 27. We have also deleted the preferred range previously recited in claim 27.

The present inventors have discovered that a certain ingredient of an ink composition which was already present in conventional ink jet compositions for completely different purposes, serves a new and surprising additional function. In the present

case, those ingredients are certain agents which have been used in the past as solvents or humectants. Now, according to the present invention it has been surprisingly found out that those compounds when used in specific ink jet ink compositions also provide a useful matting effect so that the gloss of the print is matched to the gloss of the substrate to which said print is applied. In other words, the present invention teaches a specific combination of a certain binder component and of a certain agent which in said specific combination is able to act as a matting agent.

### Novelty

The claims now presented exclude some binders which are mentioned in the specification. While these other binders principally were also found to show the desired matting effect in combination with the present matting agents, there are several problems with those binders which do not render them suitable for the envisaged ink applications. For example, acrylic resins as a binder do not provide for the necessary viscosity, which results in poor printing quality. As another example, styrene-maleic copolymer resins (which were also mentioned in the present application) do not provide for a sufficiently regular droplet formation in the ink-jet printing equipment.

The enclosed declaration of Dr. Tiller, one of the inventors of the presently claimed subject matter, explains why the selection now recited in claim 17 limits the claimed subject-matter to the most useful compositions.

Claim 34 has been voluntarily canceled.

Finally, claims 35 and 36 have been limited to the very ink jet ink composition which is now also the subject matter of claim 17.

In view of the above amendments, we believe that novelty is no longer at issue, particularly since the examiner previously acknowledged the novelty of claim 21 (which is now part of claim 17).

The anticipation rejections were based on US 6,513,921 (Houle) . It is respectfully submitted that the printing inks disclosed in Houle are substantially different from and novel over the printing inks of the present invention. Significantly, the printing inks of Houle do contain any binder component. The word "binder" does not appear even once in the entire specification of Houle. Moreover, Houle's printing ink composition are water-based, as can be seen for example from the compositions used in the examples of Houle, and e.g. column 7, lines 35 *et seq.* Thus, Houle's ink is of a completely different composition than the present invention. The ink compositions of the present invention comprise, *inter alia*, a binder component selected from a concise group. Moreover, the ink compositions of the present invention comprise an organic solvent, as can be readily gathered from the entire description of the present invention. Thus, the printing inks of the present invention are not water-based, but solvent-based.

Although a novelty rejection over Siddiqui (US 5,939,468) was not made in the office action, it is respectfully submitted that Siddiqui's ink compositions do not comprise the specific binder components of claim 17, and that this claim is novel over Siddiqui.

## Non-Obviousness

Applicant respectfully submits that neither Houle nor Siddiqui nor a combination thereof is capable of rendering obvious the subject matter of the present invention. As mentioned above, according to the present invention it has been surprisingly found that certain substances (referred to in the specification as matting agents) provide a match to the gloss of a substrate if said print is generated with a specific ink composition comprising as a binder component one of the three binders mentioned in claim 17. This is not derivable from the two references cited by the examiner. As mentioned previously, the ink compositions described by Houle are different from the ink compositions of the present invention. Houle completely lacks any binder component and is furthermore related to water-based ink compositions instead of solvent-based compositions as used in the present invention. In view of these fundamental differences, there cannot be any inherent suggestion of the invention now claimed in Houle. The substances described in the present invention as matting agents provide their unexpected and beneficial effect only in certain ink compositions which are completely of a different type than the ink compositions of Houle. It is respectfully submitted that the ink compositions of Houle will not show the desired matting effect. This is why Houle does not even suggest or point to such a beneficial effect. Applicant respectfully submits that Houle is completely irrelevant to the subject matter of the amended claims enclosed with this letter.

Nor does Siddiqui render obvious the subject matter of claim 17. Like Houle, Siddiqui addresses a completely different problem. As can be seen from column 3, lines 16 to 19 of Siddiqui, the problem to be solved was to provide an ink jet composition suitable for printing on container marks that do not blush when exposed to warm and humid conditions. Like Houle, Siddiqui does not address the problem of lack of match of gloss of the imprint to the gloss of the substrate. It is therefore not surprising that Siddiqui does not provide any pointer to the skilled person to the solution of the

present invention. In particular, neither Houle nor Siddiqui nor a combination thereof would motivate a skilled person to use of the matting agents of the present invention in specific ink jet compositions to obtain the desired match of gloss of the imprint to the gloss of the substrate.

Inasmuch as the ink compositions described by Houle are completely different from the ink compositions described by Siddiqui, we submit that the skilled person would not have even had any motivation to combine Houle and Siddiqui. It is well known that the characteristics of a printing ink composition are based on a thorough selection of the components making up said ink. A skilled person would not have deduced any finding resulting from an ink composition having a completely different nature from another ink composition. It is well known to the skilled person that water-based ink compositions cannot be readily compared with solvent-based ink compositions. Even more significantly, ink compositions comprising a binder component are completely different in their behavior as compared to ink compositions lacking such a binder component. Under these circumstances, a skilled person would not have considered combining Houle and Siddiqui.

In summary, we believe that the subject matter of the amended claims enclosed with this letter also are not rendered obvious by the references discussed above.

Respectfully submitted,

/Charles Fallow/

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